

hatch and live for some time in the water, a common species often rising up to the surface at an oblique angle with its oblique air-tube taking in air until your presence frightens them. Another species of worse reputation, so far as investigation has been carried, takes in its air while lying horizontally below the surface of the water. A few drops of kerosene oil falling on the surface of such water, whether in a pond or in a pan, is found to destroy them. A different species of mosquito is found in the swamps and marshes. And possibly there are some species whose eggs are hatched in moist earth or decaying matter.

Now if it should be proved that the mosquitoes are the main carriers of malaria, a general attack upon them by mankind must follow. But we can never attack with success without a knowledge of their several habits. See how important it may be for us to know the life histories of some of these insignificant insects in order to preserve our lives. They may be more difficult enemies to deal with than Boers or Russians.

Why should not the school boy who has often so much time on his hands take up the study of our mosquitoes, know the different kinds, study their habits and their native homes. We could then the better know how to apply the facts worked out by the patient and tireless biologist. And mind you, there may be such poisoners among the other insignificant looking flies or other insects. These are the real kissing bugs whose kiss brings disease and death to so many of our kind.

M.

The Heavens in September.

With the fall of the year the glories of the southern heavens depart, but high in the north the splendor of the stars is enhanced. September witnesses the beginning of the reign of the "royal house of Cepheus." Opposite to the Great Dipper, as it sinks toward the horizon westward from the pole, will be seen rising Cepheus, Andromeda, Cassiopeia, and Perseus. Cepheus lies between the head of the Northern Cross (Cygnus) and the Pole Star. Just east of Cepheus is Cassiopeia, unmistakable on account of its curious zig-zag figure, formed by five stars, four of the second and one of the third magnitude. South of Cassiopeia is Andromeda, marked by an extended row of four stars, three of the second magnitude, the most westerly and southerly standing at one corner of the Great Square of Pegasus. Following Andromeda and Cassiopeia from the northeast comes Perseus, the hero of the world-famous story which gave this group of constellations to the map of the sky. The Milky Way, running in bright reaches from Cygnus downward through

Cassiopeia and Perseus, adds its sheen, like a royal baldric, to the beauty of their stars. Between Cassiopeia and Perseus even a careless eye detects a curious shining spot. It is the celebrated gathering of minute stars constituting the "sword handle" of Perseus, and is one of the finest objects in the heavens for a low-power telescopic view. An opera-glass shows many of its twinkling multitude. Draw an imaginary line from the Pole Star through the bow-shaped row of stars marking the middle of Perseus, and extend it about ten degrees further south, and it will lead the eye to a little lone group, the brightest member of which is very famous under the name of Algol. It is, perhaps, the most remarkable variable star in the heavens. There will be a minimum of Algol on September 11 a little before 10 o'clock p. m. Eastern standard time.

During September, four of the planets will be in the constellation Virgo, viz.: Mercury, Venus, Mars and Jupiter. Two of them, Jupiter and Mars are in that constellation at the beginning of the month. Mercury and Venus enter it later, moving eastward from Leo. Mercury is a morning star and reached its greatest western elongation on the 5th, when it was conspicuous before sunrise, since it was then within a few days of perihelion and consequently nearly at its greatest brilliancy. No planet undergoes such alterations of light and heat as those of Mercury. When in perihelion the sunlight falling upon its surface is more than twice as intense as in aphelion. At the end of the month, Mercury passes behind the sun, emerging as an evening star in October. Venus is also a morning star, but much nearer the sun than Mercury, and on the 16th it will pass behind the sun in superior conjunction. Mars, in Virgo, is an evening star, but inconspicuous. Jupiter, in Virgo, is also, of course, an evening star, showing bright in the west after sundown. About the 6th Jupiter crosses the line from Virgo into Libra. Saturn, in Ophiuchus, just north of Scorpio, will remain a conspicuous evening star during September, gradually drawing westward and setting earlier. Its brightest satellite, Titan, will be south of the planet on the 2d and the 18th, west on the 6th and the 22d, north on the 10th, and east on the 14th. Uranus, in Scorpio, and Neptune in Taurus, although wide apart, are both evening stars.

The sun enters Libra, and the astronomical autumn begins on the 23d at 1 a. m., Eastern time.—*Garrett P. Serviss in Scientific American.*

WHAT is needed in the education of our boys and girls is a training that will enable them to act promptly, readily and at a moment's notice. It is surprising how many people dribble at their work, and this tendency to dribble should be remedied at school.